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ABSTRACT

Preschool readiness measures were secured on 50 pairs of disadvantaged 2- to 3-year-old lower SES white children who represented large and small families, to determine the impact of family size on readiness profiles. The findings reveal that children from small families secured higher scores on all nine skill areas of the Iowa Test of Preschool Development. However, only in expressive language were the differences of statistical significance. The findings were reviewed in the context of other research which suggests that poor children may experience greater difficulty on oral language tasks than is the case on measures which emphasize receptive language. It is suggested that replication studies are needed to better assess the long-term social and educational implication of the findings. (Author/CS)

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FAMILY SIZE AND LEARNING READINESS PROFILES OF SOCIOECONOMICALLY DISADVANTAGED PRESCHOOL WHITES

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Summary

Preschool readiness measures were secured on 50 pairs of disadvantaged 2 to 3 year old lower SES white children who represented large and small families, to determine the impact of family size on readiness profiles. The findings reveal that children from small families secured higher scores on all 9 skill areas of the Iowa Test of Preschool Development. However, only in Expressive Language were the differences of statistical significance. The findings were reviewed in the context of other research which suggests that poor children may experience greater difficulty on oral language tasks than is the case on measures which emphasize receptive language. It is suggested that replication studies are needed to better assess the long-term social and educational implication of the findings.

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TEXT

Several extensive surveys have revealed that few compensatory education programs have enabled disadvantaged children to maintain long-term academic gains.[6],[3] As a result of these disappointing studies, increased attention is being directed to the early years in the hope that preschool enrichment may be more productive than intervention with school-age children.[5]

It is generally acknowledged that the learning needs of children vary widely. This suggests that in the future more effective preschool programs

may be characterized by individualization of enrichment strategies.[7] In view of the evidence that family background factors play a central role in the development of intelligence[11], it is feasible that within-family factors such as family size may significantly influence cognitive development. For example, in a large family, parents may spend less time with individual children than is the case within small families. If so, family size might not only influence the course of cognitive development, but clinical assessments may disclose quasi-specific enrichment procedures which may be more effective with many children from large, or small, families. This possibility is enhanced by evidence that within-family influences have their greatest effect during the very early years.[1]

Family size has been shown to be related to achievement of school-age children.[4] However, there has been little investigation into possible relationships of family size and within-child cognitive profiles of preschool children. The authors are aware of only one study which specifically investigated family size and the intra-child learning profiles of preschool blacks.[8] Results from this study revealed that low SES blacks from small families significantly outperformed their SES-matched counterparts on 3 of the 9 skill areas of the Iowa Test of Preschool Development (ITPD)---Expressive Language, Visual Memory and Expressive Concepts. The present study was designed to assess possible interrelationships between family size and learning patterns of preschool, low SES, white children.

Method

Study Setting: As part of Home Start, a Title III ESEA project, 569 preschool white children residing in 21 Iowa communities were given the ITPD. From this pool of Ss, matched pairs were secured to evaluate possible relationships between family size and early learning patterns.

Subjects: Ss from large families were defined as children with 3 or more siblings; Ss from small families had 1 or 0 siblings. Children with 2 siblings were excluded from the study. SES was determined by occupation of the male head of household. Where no male was present, the occupation of the child's natural father was used to secure an index of head of household. Ss employed in the study were from families in the occupational group identified as "operatives, service workers (including private household), farmers and farm managers" in the most recent statistics from the U. S. Bureau of the Census.[10] Nationally, this occupational group comprises 27.6% of the U. S. population and is the fourth lowest of five major occupational categories (The lowest SES group consists of laborers, farm laborers and farm foremen and comprises 5% of the U. S. Population).

The experimenters secured matched Ss on the basis of SES, sex and CA; in no matched pair did the children differ in CA by more than 3 months. Using these procedures, 50 matched pairs were secured (mean CA 34.7 and 34.9 months and CA range 25 to 41 and 25 to 42 months for Ss from large and small families, respectively).

Instrument: The ITPD is an achievement-oriented preschool instrument which was designed specifically for children from 2 to 5 years of age. For each child, the test provides a profile of learning readiness based on a modified psycho-linguistic model.[9] The test consists of 4 subtests (Language, Visual Motor, Memory, Concepts), which are further divided into the following skill areas: Receptive Language, Expressive Language, Large Motor, Small Motor I (paper/pencil tasks), Small Motor II (beads and string, pegs and pegboard), Visual Memory, Auditory Memory, Receptive Concepts (involving understanding of color, size and number concepts), and Expressive Concepts (requiring the child not only to understand concepts but to employ concept terms in oral expression).

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Results and Discussion

Table 1 shows that children from small families secured higher scores on all 9 skill areas. However, only on the Expressive Language skill area were the differences of statistical significance. It is of interest that the scores of

------Insert Table 1 about here------

both groups of children were noticeably low in Receptive and Expressive Concepts. This suggests that low SES whites, irrespective of family size, may profit from early enrichment in the acquisition of concepts.

The results of this experiment cannot be directly compared with the findings of the somewhat comparable study involving low SES blacks, since the black Ss represented the fifth, or lowest, SES. However, it appears that results from the present study support the position that poor children from large families are particularly vulnerable on oral-expressive tasks.

The findings of this investigation are also consistent with studies which Hunt has cited and which indicate that low SES children experience difficulty in acquiring linguistic skills.[2] Hunt suggests that verbal interaction of poor children is often restricted to commands to stop whatever the child is doing, and that low SES preschoolers are therefore seldom asked questions which require that they provide verbal responses. This study supports Hunt's thesis and also suggests that limited environmental opportunity to develop expressive skills may be especially prevalent among poor children from large families.

Should replication studies support these results, it is possible that low SES children from large families are less likely to experience classroom success in kindergarten or first grade. Presumably, in many classrooms oral expression is more likely to elicit positive reinforcement than competency in

receptive language. The first classroom teachers of poor children from large families might therefore be advised to (1) promote children's success on learning tasks which utilize receptive language and (2) be prepared to help children successfully bridge the gap which separates competence in receptive and expressive language.

Finally, if replication experiments should confirm the results of this study, it is possible that the presumed bias of certain tests, at least as that bias might disadvantage the child from a large family, may be reduced by encouraging diagnosticians to include measures of receptive language.

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Footnotes

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Table 1

ITPD (Level I) Skill Area Achievement Indexes of

White Children from Large (N=50) and Small (N=50) Families

	Small Family	Large Family	p
Receptive Language	109.4	107.7	NS
Expressive Language	105.1	96.8	.01
Large Motor	99.6	96.4	NS
Small Motor I	101.2	98.4	NS
Small Motor II (pegs)	103.1	102.1	NS
Visual Memory	100.0	97.7	NS
Auditory Memory	102.4	99.0	NS
Receptive Concepts	91.2	86.6	NS
Expressive Concepts	85.9	84.0	NS